Important Short Questions

Unit # 10:

1. Differentiate between breathing and respiration.
2. How does gaseous exchange in plants take place?
3. What are lenticels? What are their functions?
4. What is a larynx? What its function?
5. What is trachea? How does cartilage in its walls keep it from collapsing?
6. What are alveoli? Write their functions?
7. Define oxygenated blood.
8. Define breathing and write the names of its two processes.
9. Differentiate between inhalation and exhalation.
10. How breathing rate is controlled in humans?
11. What are the types and symptoms of bronchitis?
12. What is Emphysema? Give its two symptoms.
13. What are the symptoms of Asthma?
14. What is nicotine? What are its harmful effects?
15. How smoking affects teeth? Or effect of smoking.

Unit # 11:

1. Define homeostasis. Give two examples.
2. What is osmoregulation?
3. What is meant by thermoregulation?
4. What is meant by excretion?
5. Differentiate between turgidity and guttation.
6. What are hydrophytes? Give two examples.
7. What are xerophytes? Give examples.
8. Name the organs of urinary system of man.
9. What is a renal corpuscle? Write the names of its two important parts.
10. What is renal tubule?
11. What do you mean by kidney failure?
12. What are the causes of kidney failure?
13. Describe the process of peritoneal dialysis.

Unit # 12:

1. Define coordination.

2. Define stimulus. Give any two examples.
3. What are receptors/sense organs? Give examples
4. What are effectors? Explain with example.
5. Define response. Give one example.
6. What is a neuron?
7. What are the types of neuron according to their function?
8. Differentiate between sensory neurons and motor neurons?
9. What are the types of nerves on the basis of property of axons?
10. What is hypothalamus? Give its function.
11. What is midbrain and its function? Where is it located?
12. What is hypermetropia and its causes? How it can be rectified?
13. What is an endocrine system?
14. Write two functions of oxytocin hormone.
15. Write the causes and symptons of paralysis.
16. What is meant feedback mechanism? How the secretion of hormones is regulated?

Unit # 13:

1. Define skeleton.
2. What are two main types of skeleton system?
3. What is the function of skeleton system.
4. What is a cartilage? Give its structure.
5. What is elastic cartilage and where is it located? Give two examples.
6. Differentiate between compact bone and spongy bone.
7. What is appendicular skeleton?
8. What are the types of joints? Write their names and give examples.
9. What is tendon and its function?
10. What is antagonism?
11. What is osteoporosis? Give its symptoms and cause?
12. What is rheumatoid arthritis and its symptoms?
13. What is gout? Give its causes and symptoms.

Unit # 14:

1. Define reproduction. Give its importance.
2. Differentiate sexual and asexual reproduction.
3. Define parthenogenesis. Give examples.

4. What are bulbs? How reproductions of plants take place by bulbs? Give examples.
5. Define cloning and tissue culture.
6. What is meant by alternation of generation in plants?
7. What is pollination? What are types of pollination?
8. Define parthenocary with example.
9. What is double fertilization?
10. What is epigeal germination? Give its examples.
11. Define hypogeal germination. Give examples.
12. Write two conditions necessary for seed germination.

Unit # 15:

1. What is a monohybrid cross?
2. What is Mendel's law of segregation?
3. What is co-dominance? Explain with examples.
4. Write two possible genotypes for blood group A.
5. Write two possible genotypes for blood group B.
6. What are the main sources of variations in sexually reproducing populations?
7. Write two characteristics of discontinuous variations.
8. Differentiate between continuous and discontinuous variations.
9. What is meant by "Natural Selection"?
10. What is meant by "Articial Selection"?

Unit # 16:

1. Define a food chain. Give one example.
2. What is a food web?
3. What is meant by an ecological pyramid? Write its types.
4. What is meant by nitrogen fixation?
5. What are different methods of nitrogen fixation?
6. What is "ammonification"? Which organisms are involved in this process?
7. What is "nitrification"? Which organisms are involved in this process?
8. What is meant by competition in an ecosystem?
9. Define predation with one example.
10. Define Parasitism with example.

11. Differentiate between ectoparasites and endoparasites. Give their examples.
12. What is mutualism? Give its one example.
13. What is commensalism? Give one example.
14. What is acid rain?
15. What is utrophication?

Unit # 17:

1. Define Biotechnology.
2. What is genetic engineering?
3. What are the objectives of genetic engineering?
4. What are the basic steps in genetic engineering?
5. Enlist the achievements of genetic engineering.
6. What is single cell protein?
7. How single cell is prepared?
8. What is fermentation? Write its examples.
9. What is Lactic acid fermentation?
10. Define fermenter with two uses.
11. Write names of two methods of fermentation in fermenters.
12. Write two advantages of using fermerters.

Unit # 18:

1. Differentiate between medicinal drug and addictive drug with example.
2. What are synthetic drugs? Give their examples.
3. Write the two names of drugs obtained from minerals?
4. What are narcotics? Give their examples and uses.
5. Differentiate between sedatives and narcotics.
6. What are hallucinogens? Give their examples.
7. Differentiate between bactericidal and bacteriostatics.
8. What are sulpha drugs/sulfonamides?
9. What are vaccines?

Important Short Questions

Unit # 10:

1. How gaseous exchange occurs in plants?

2. Enlist the different parts of the air passage way of human respiratory system.
3. Describe the mechanism of breathing in humans.
4. Describe the symptoms, causes and prevention of Lung Cancer.

Unit # 11:

1. How do the plants remove extra water from their bodies?
2. Describe the structure of kidney.
3. What is the functional unit of kidney? Describe its structure and draw labeled.
4. Define osmoregulation. Describe the role of kidney in osmoregulation.
5. Write a note on "Haemodialysis".

Unit # 12:

1. Explain Reflex and Relex Arc with the help of diagram.
2. Describe the structure of human eye.
3. Explain the disorders of the eye.
4. Write a note on "Pituitary Gland".
5. What do you know about Thyroid Gland? Name its hormones and describe their functions.

Unit 13:

1. What is meant by joint? Describe different types of joints?
2. What is Arthritis? Write down its symptoms and treatment. Also describe its different types.
3. Explain antagonism in muscle action selecting biceps and triceps as example.

Unit 14:

1. What is meant by Binary Fission? How asexual reproduction by "Binary Fission" takes place in Bacteria, Amoeba and Planaria?
2. Define vegetative propagation. Describe different ways of natural vegetative propagation. Write advantages/disadvantages.
3. Explain sexual reproduction in plants.
4. Define pollination. What are its types?

5. What conditions are necessary for the germination of seeds?
6. What are male/female reproductive systems of rabbit?

Unit 15:

1. Describe the Watson-crick DNA model.
2. Explain and state with examples Mendel's law of segregation.

Unit # 16:

1. Discuss the biotic components of an ecosystem.
2. Write a detail note on food chain and food web.
3. Write a note on Nitrogen Cycle.
4. Write a note on Symbiosis.

Unit # 17:

1. Write down the scope and importance of Biotechnology.
2. What do you know about fermentation? Explain briefly.
3. Define Single-Cell Protein. Write its importance.

Unit # 18:

1. Describe different source of drugs.
2. Write a note on "Resistance against antibiotics".
3. Describe the mode of action of "Vaccines".